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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,338	03/29/2004	Mahendra Madhukar Patil	140320-1/YOD GERD:0106	2694

7590 03/16/2007

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EXAMINER	
SUERETH, SARAH ELIZABETH	
ART UNIT	**PAPER NUMBER**
3749	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/812,338	PATIL ET AL.	
	Examiner	Art Unit	
	Sarah Suereth	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Receipt of applicant's amendment filed on 2/23/07 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-7, 14-20, 22-28 and 35-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melink 6170480 in view of Bowen 4146016, further in view of Morton 6349716.

Melink discloses the claimed invention: a sensor (76,94,96,82,102) for detecting smoke and combustion products (col. 5, lines 66-67) above an active zone of a cooktop (18), an air moving device (50), control circuitry (70,72) coupled to the sensor and the air moving device, for regulating operation of the air moving device (col. 6, lines 27-31).

Regarding claims 3,23, and 36, Melink discloses that the sensor (82) can be an IR temperature sensor (col. 4, lines 25-30).

Regarding claims 4, 18,26,27,39, and 40, Melink discloses a temperature sensor (76), and also a humidity sensor (col. 9, lines 4,5).

Regarding claims 5 and 20, the controller has several predefined programs activated by the user (col. 10, lines 48-51) via a user interface (134).

Regarding claim 6, the controller is configured to respond to the temperature and humidity sensors (col. 9, lines 1-3).

Regarding claims 7 and 19, the controller sends and receives signals (col. 10, lines 41-44), and is read as capable of receiving at least one of the claimed signals.

Regarding claims 22 and 28, Melink discloses that the controller is configurable by the user (col. 10, lines 57-60), which is read as meeting the claimed limitation "configurable based on installation location".

Regarding claim 35, the Melink apparatus has the claimed structure, and is disclosed as reducing acoustic noise by varying the fan speed (col. 3, lines 25-30).

Regarding claim 41, the controller uses set point references; an example being a maximum temperature beyond which fire control is activated (col. 10, lines 12-15).

Regarding claim 42, Melink discloses varying the volume ramp over time intervals (col. 3, lines 25-30).

Regarding the table of claim 43, Melink discloses that the controller stores a set of values for volume rates (col. 7, lines 40-45), which is regarded as the claimed look up table.

Melink does not discuss operating in either recirculation or exhaust mode utilizing an air flow direction device connected to the controller. Melink discloses operating in an exhaust mode only, utilizing supplemental air from outside to resupply the air inside the kitchen.

However, Melink discusses the difficulty of maintaining the interior temperature of the kitchen during the winter, as continuing to draw in cold outside air would cause the kitchen inside temperature to become uncomfortable (col. 9, lines 37-43).

Bowen solves this problem by providing an adjustable damper (76) movable between an exhaust (Fig. 2) and recirculation (Fig. 3) position.

Bowen teaches that providing a recirculation air path inside the hood allows for the heat to be conserved in the kitchen (col. 3, lines 63-68 and col. 4, lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Melink apparatus by adding an adjustable damper as taught by Bowen in order to conserve heat in the kitchen (Bowen, col. 4, lines 1-2).

As discussed above, Bowen does not suggest that the damper is automatically controlled. The damper is disclosed to be manually movable between two positions (col. 4, lines 31-32).

Morton discloses: a ventilation system (10) including a sensor (60), an air moving device (33); an air flow direction control device (34) for directing the air between exhaust and recirculation pathways (col. 2, lines 36-40); and control circuitry (62) for

regulating the position of the flow control device based upon signals from the sensor (col. 3, lines 47-49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Melink in view of Bowen apparatus by automating movement of the damper as taught by Morton in order to allow the damper to be automatically adjusted when triggered by a temperature sensor (col. 3, lines 50-53).

The method claims 14-20 and 35-43 are rejected because the prior art apparatus discussed above performs the claimed method steps.

5. Claims 8, 9, 11-13, 21, 29, 30, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melink 6170480 in view of Bowen 4146016, further in view of Morton 6349716, as discussed above, and further in view of Wang et al 5236595.

As discussed above, the Melink in view of Morton combination does not include a grease filter.

Wang et al shows a filter (col. 6, lines 11-24) for the purpose of purifying air (col. 6, line 9). The filter is taught to remove grease (col. 6, line 8), odor (col. 6, line 9), and bacteria (col. 0, line 8). The air purification device also includes UV air purification (col. 6, lines 28, 29), which is read as an active device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Melink in view of Morton apparatus with the Wang air purification device, in order to remove undesirable constituents (col. 5, lines 16, 17).

Claim 21 is rejected because the prior art apparatus discussed above performs the claimed method step.

6. Claims 10 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melink in view of Bowen, further in view of Morton and Wang as discussed above, and further in view of Jensen 6521859.

As discussed above, Wang et al discloses a UV air purification device, but not a corona discharge device.

Jensen teaches that both UV air purification devices and corona discharge devices work to irradiate air (col. 1, lines 66, 67).

The courts have held that substituting known equivalents for the same purpose is not a patentable modification (In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982), also MPEP 2144.06).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Melink/Bowen/Morton/Wang apparatus by substituting the Jensen corona discharge device for the UV air purification device, in order to produce high quantities of ozone at a low cost (Jensen col. 2, lines 11-15).

Claim 31 is rejected because the prior art apparatus discussed above performs the claimed method step.

Response to Arguments

7. Applicant's arguments filed 2/23/07 have been fully considered but they are not persuasive.

8. In response to applicant's argument that the Morton reference teaches using the sensed temperature of the hood itself and not the air flowing past the hood to trigger motion of the damper, the examiner notes that the temperature sensor (60) is positioned **inside** of the hood (col. 3, lines 42-45, also Figure 1), and serves to monitor the temperature "within the hood" (col. 3, lines 45-46), which obviously includes the temperature of the exhaust products flowing past the sensor.

9. Regarding claim 22, the claim requires that the controller be "configurable". Since Melink clearly discloses that the controller is able to be configured (col. 10, lines 57-60), the Melink apparatus is capable of being adjusted to include any desired parameters. Additionally, the examiner notes that Melink explicitly discloses configuring the controller to account for the outside temperature (col. 10, lines 48-53), which is regarded as a "site specific factor". Contrary to applicant's arguments, the claim does not currently require adjusting the controller to consider any of the factors listed on page 12 of the remarks.

10. Regarding claim 35, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The Melink apparatus controls the speed of the fan, which obviously affects the amount of acoustic noise generated.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Suereth whose telephone number is (571) 272-9061. The examiner can normally be reached on Monday to Thursday 7:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Rinehart can be reached on (571) 272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sarah Suereth
Examiner
Art Unit 3749

KENNETH RINEHART
PRIMARY EXAMINER